

4.3. March 1981

Dear Arthur,

Thank you for sending me the revised version of your paper. The new footnote 4 clarifies my misunderstandings about the significance of the  $\langle x, y \rangle$  level of description.

With regard to locality and the Correlation rule, I would make two comments at

points raised in your letter:

1) When I suggested  $\left[ \mathcal{I} \otimes \mathcal{B} \right]_{P(A)}^4 + \left[ \mathcal{I} \otimes \mathcal{B} \right]_A^2$

I had in mind two incompatible measurements on the A-system.

E.g. with A maximal and  $P(A)$  degenerate measure  $f(A)$  by uniting  $f(A) = g(c)$  where  $\left[ A, c \right] \neq 0$ , and then measure  $c$  and  $P(A)$ .

apply  $g$  to the result.

$$\text{so } [f(A)]_D = g([c])$$

and  $g$  now blocks the derivation of

$$g([c]) = f([A])$$

a relationship between the incomparable magnitudes  $A$  and  $c$ , which is what we requires to derive a Kochen-Specker paradox in the  $A$ -system.

2.) I agree unrestricted use of the 'extended spectrum rule' leads to FENCE and hence to inconsistency, but in your 1974 paper you did allow this rule to hold for genuinely measurable observables which presumably would include measurements on two separated systems such as and are dealing with in the Correlation Rule.

With best wishes

Yours sincerely  
Richard